

Having thus described the invention, what is claimed is:

1. A contact structure for a sliding switch, comprising:
  - a conductive stationary contact disposed on a base; and
  - 5        a conductive movable contact for electrically contacting said stationary contact, said movable contact being movable along a path between a non-contact position and a make contact position with respect to said stationary contact,
    - at least one of said stationary contact and said movable contact having a
    - 10      protruding portion that provides an electrical interface for discharge of arcing as said movable contact breaks from said stationary contact.
2. The contact structure for a sliding switch as recited in claim 1, wherein said stationary contact is a flat pad.
- 15      3. The contact structure for a sliding switch as recited in claim 2, wherein said movable contact is generally substantially shaped as a cylinder.
4. The contact structure for a sliding switch as recited in claim 3, wherein  
20      said movable contact is oriented such that a radius of said cylinder is parallel with respect to said path.

5. The contact structure for a sliding switch as recited in claim 4, wherein  
said movable contact having a contacting surface that electrically contacts said  
stationary contact when said movable contact is in said make contact position,  
said contacting surface having a width measured transversely with respect to  
said path, said protrusion having a width measured perpendicularly with respect  
to said path,
6. A contact structure for a sliding switch, comprising:
  - 10 a conductive stationary contact disposed on a base;
  - 15 a conductive movable contact disposed to slide with respect to said  
stationary contact along a path extending between a non-contact position where  
said movable contact is electrically isolated from said stationary contact and a  
make-contact position where said movable contact maintains a primary  
electrical interface with said stationary contact;
  - 20 a contacting zone defined on said stationary contact that electrically makes  
contact with said movable contact when said movable contact is in said make-  
contact position; and  
an arcing zone defined on said stationary contact that electrically breaks  
from or makes said movable contact when said movable contact moves from  
said make-contact position to said non-contact position and vice versa, said  
arcing zone providing an electrical interface where arcing occurs between said  
stationary contact and said movable contact,

wherein said stationary contact and said movable contact are mutually shaped and oriented such that when said contacting zone is projected along said path onto said arcing zone, at least a portion of a projection of said contacting zone lies outside said arcing zone thereby providing a region within said 5 contacting zone which is generally outside of an arcing erosion debris path created by said movable contact as said movable contact slides across said stationary contact.

7. A method for preventing degradation in performance of a sliding switch comprising the steps of:

10 providing a conductive stationary contact disposed on a base;  
providing a conductive movable contact for electrically  
contacting said stationary contact, said movable contact being  
movable along a path between a non-contact position and a make  
contact position with respect to said stationary contact; and  
15 causing arcing to occur outside said path upon engagement or  
disengagement between said contacts.